

Director's Report and Recommendation

LIVING BUILDING PILOT PROGRAM

November 10, 2009

I. Introduction

The Department of Planning and Development (DPD) is proposing a Living Building Pilot Program to facilitate the development of buildings that would meet the Living Building Challenge, a standard of the International Living Building Institute for buildings meeting the highest level of sustainable design. This proposal would modify the design review process for selected projects to allow additional departures through design review.

II. Background and Analysis

The Living Building Challenge is a green building rating system created by the International Living Building Institute to recognize buildings meeting the highest level of sustainability. Version 1.3 of the Living Building Challenge requires buildings to meet 16 prerequisites within six performance areas, or Petals: Site, Energy, Materials, Water, Indoor Quality, and Beauty + Inspiration. In general, these prerequisites require buildings to not be built on environmentally sensitive sites, use recycled materials, generate as much or more electricity as they use through sustainable sources, capture as much rainwater as they use, treat wastewater on site, and meet a number of standards for other elements, such as material use and indoor environment.

In order to meet the stringent performance standards of the Living Building Challenge, buildings generally rely upon innovative building design techniques and features including natural daylighting and ventilation, solar capture, rainwater capture and use, wastewater treatment and reuse, and ultra-efficient heating, ventilation and air conditioning (HVAC) systems. These systems can substantially increase design complexity and necessitate early integrated design processes to ensure that all systems are compatible and work in an efficient manner, and that each performance goal can be met. These innovative systems may also necessitate alternative building massing, non-traditional exterior and roof top features, or other elements that were not envisioned when existing codes were adopted. Existing codes were designed to provide minimum standards rather than the flexibility to consider radically different building strategies. Additionally, projects may meet the Living Building Challenge through incorporation of uncommon urban accessory uses such as agricultural uses that use waste streams such as treated waste water.

In order to accommodate new design process challenges and alternative building designs, the Living Building Pilot Program would expand the Land Use Code departures allowed through design review.

Project Enrollment

In order to participate in the Living Building Pilot Program, an applicant must submit a plan demonstrating how their proposal would meet each of the prerequisites of the Living Building Challenge. Enrollment will be limited to a total of 12 qualifying projects over a period of three years. Only projects eligible for design review can participate in the pilot program; this excludes single-family houses and projects in industrial zones. Projects located in the shoreline district will also be excluded.

Design Review Pathway

Qualifying projects will participate in the design review process provided in Section 23.41.014 of the Seattle Municipal Code, except that additional departures will be allowed and the criteria for departures are proposed to be modified. All projects participating in the Living Building Pilot Program will be required to go before the Design Review Board (DRB), rather than going through administrative design review.

Departures

In addition to existing criteria governing departures from development standards, additional departures may be allowed if an applicant demonstrates that such departures would better meet the goals of the Living Building Challenge and would not conflict with adopted design guidelines. In recommending any departure from development standards, the DRB must consider the extent to which the anticipated environmental performance of the building would be substantially compromised without the departures.

In addition to the Land Use Code departures currently allowed through design review, the following standards may also be modified or waived for buildings qualifying for the Living Building Challenge:

- use provisions (i.e. permitted, prohibited or conditional use), but only for accessory uses that would directly address a prerequisite of the Living Building Challenge;
- residential density limits;
- downtown view corridor requirements;
- floor area ratios up to 15% above the otherwise applicable limit;
- maximum size of use;
- structure height, except only rooftop features may extend more than 10 feet above the otherwise applicable limit;
- quantity of parking required, minimum and maximum parking limits, and minimum and maximum number of drive-in lane;
- solid-waste containers storage;
- downtown open space;
- downtown parking access; and
- street, alley and easement requirements.

Applicants could also choose to use the building code height measurement technique instead of the Land Use Code technique.

The Director of DPD would remain the decision-maker on any departures and would not be governed by the provision of the Land Use Code that limits the Director's ability to modify or amend the recommendations of the Design Review Board.

Minimum Requirements

An applicant participating in the Living Building Pilot Program for whom departures are approved will be required to meet minimum green building requirements or face monetary penalties. While the goal of the project is to encourage buildings that meet the Living Building Challenge, DPD recognizes that the Living Building Challenge is a difficult standard to meet and that some flexibility is required in setting standards. Consequently, all participating projects that receive departures must either meet the Living Building Challenge or meet 60% of the Living Building Challenge pre-requisites and all of the following alternative minimum standards:

- energy usage, including all electricity, heating, and cooling requirements and subtracting energy generated on site, must be 25% or less of the average energy usage for a comparable building not in the Living Building Program;
- water usage, subtracting harvested rainwater use, must be 25% or less of the average water usage for a comparable building not in the Living Building Program; and
- 50% of stormwater must be captured and used on site.

In the event a building does not meet these minimum performance goals, the owner would be subject to a maximum penalty of 5% of the construction value and a minimum penalty of 1% of construction value, based on the extent of compliance with standards.

III. Recommendation

The proposed Living Building Pilot Program is intended to promote the public interest by encouraging the development of innovative “living” buildings that can reduce environmental impacts, test new technologies, and serve as a model for development throughout the region. The pilot program would also help the City identify potential changes to Land Use Code requirements or processes, such as Design Review, that may facilitate the development of additional living buildings or buildings that will, at a minimum, better address growing environmental concerns, and encourage new buildings in Seattle to meet the highest sustainable standards. DPD recommends approval of the proposed Living Building Pilot Program.